
Approaches to Credit and Credit Enhancement

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Overview

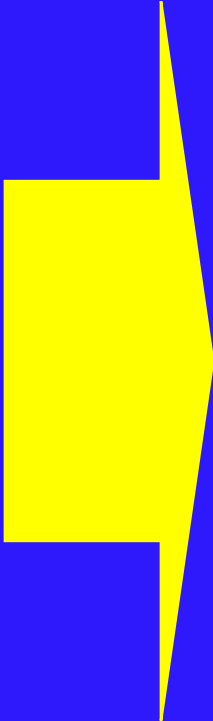
- What is Credit?
- Does it Matter?
- How to Improve Credit
- Who Can Help Enhance Credit?
- The Enhancement Options
- How Do You Assess the Options
- Case Studies...and War Stories
- It's Not Just About Bond Insurance

What Is Credit and Why Does it Matter?

Issuers Use Ratings in Many Ways



**Finance Officers
Treasurers
and Other Issuers**



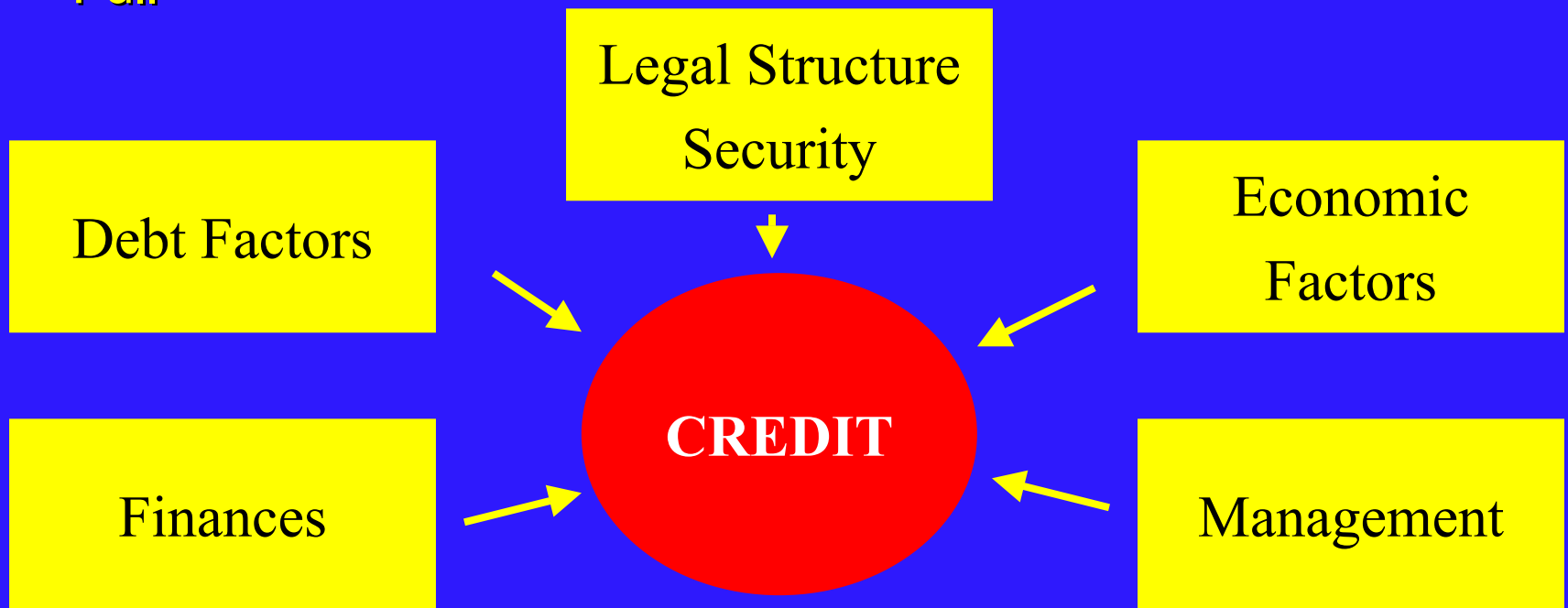
Financial Officer's
Responsible for
Municipality Rating

Investors in
Municipal Bonds
and Other Securities

Managers of, or Investors
In, Rated
Investment Portfolios

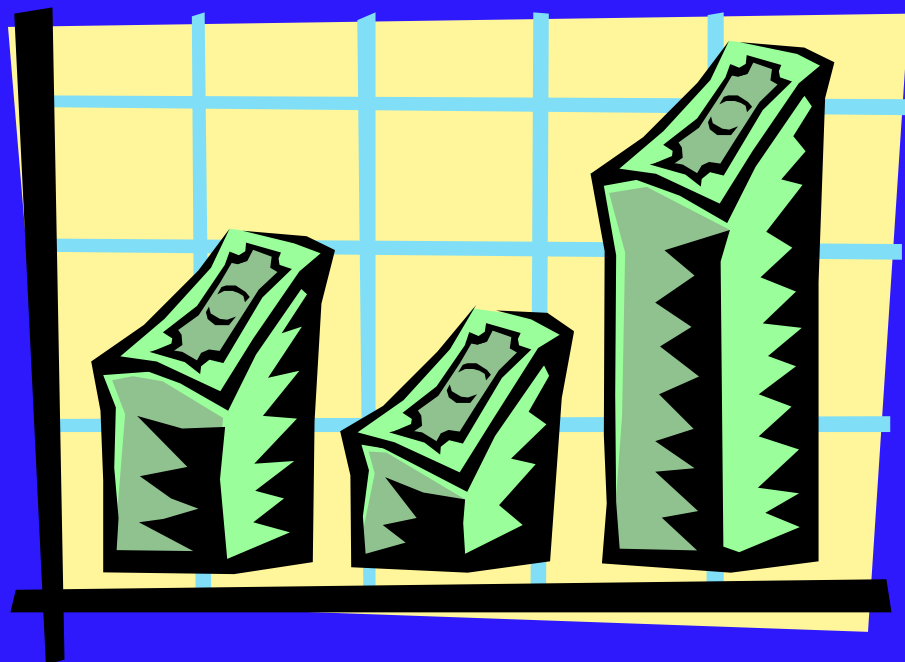
What is Credit?

- An Evaluation of a Borrower's Willingness and Ability to Repay its Obligation
- Considers Whether Payment Can Be Made on Time and In Full



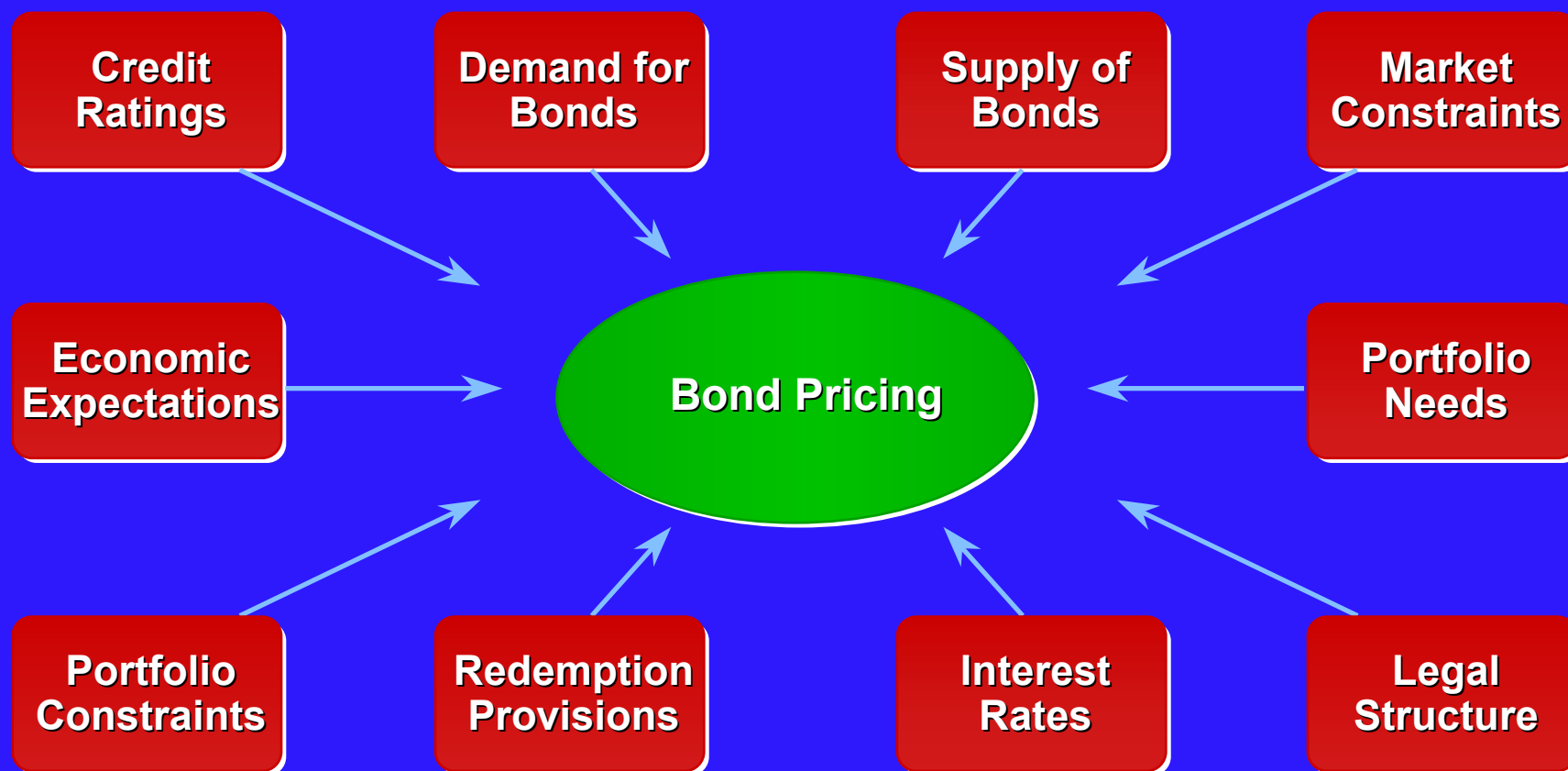
Role of the Rating Agencies

- Credit Evaluation
 - Issuer's Ability to Pay
 - Issuer's Willingness to Pay
- Used by Investors
 - Investor's Willingness to Buy Securities
 - At What Price?

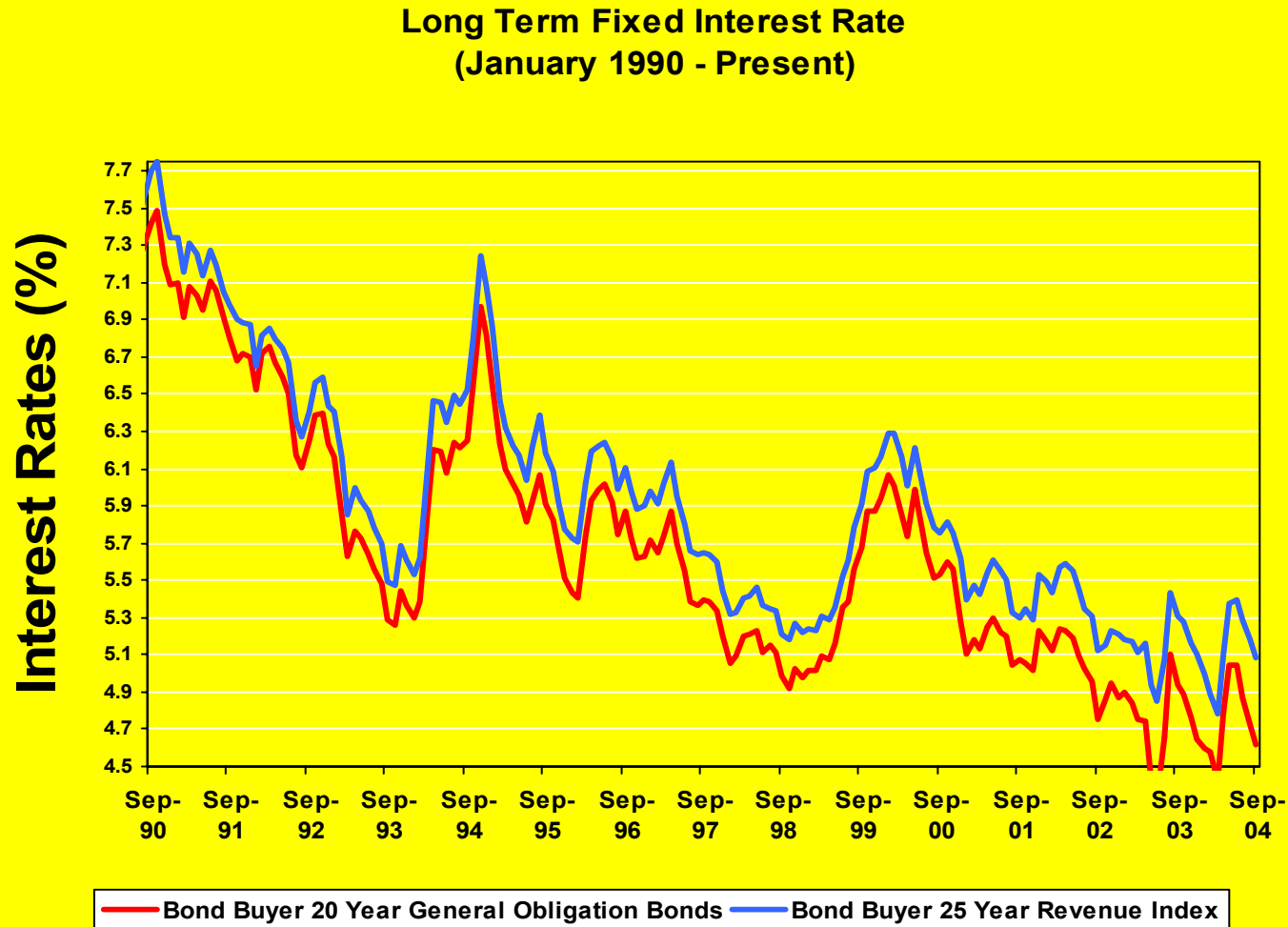


Factors in the Pricing of Bonds

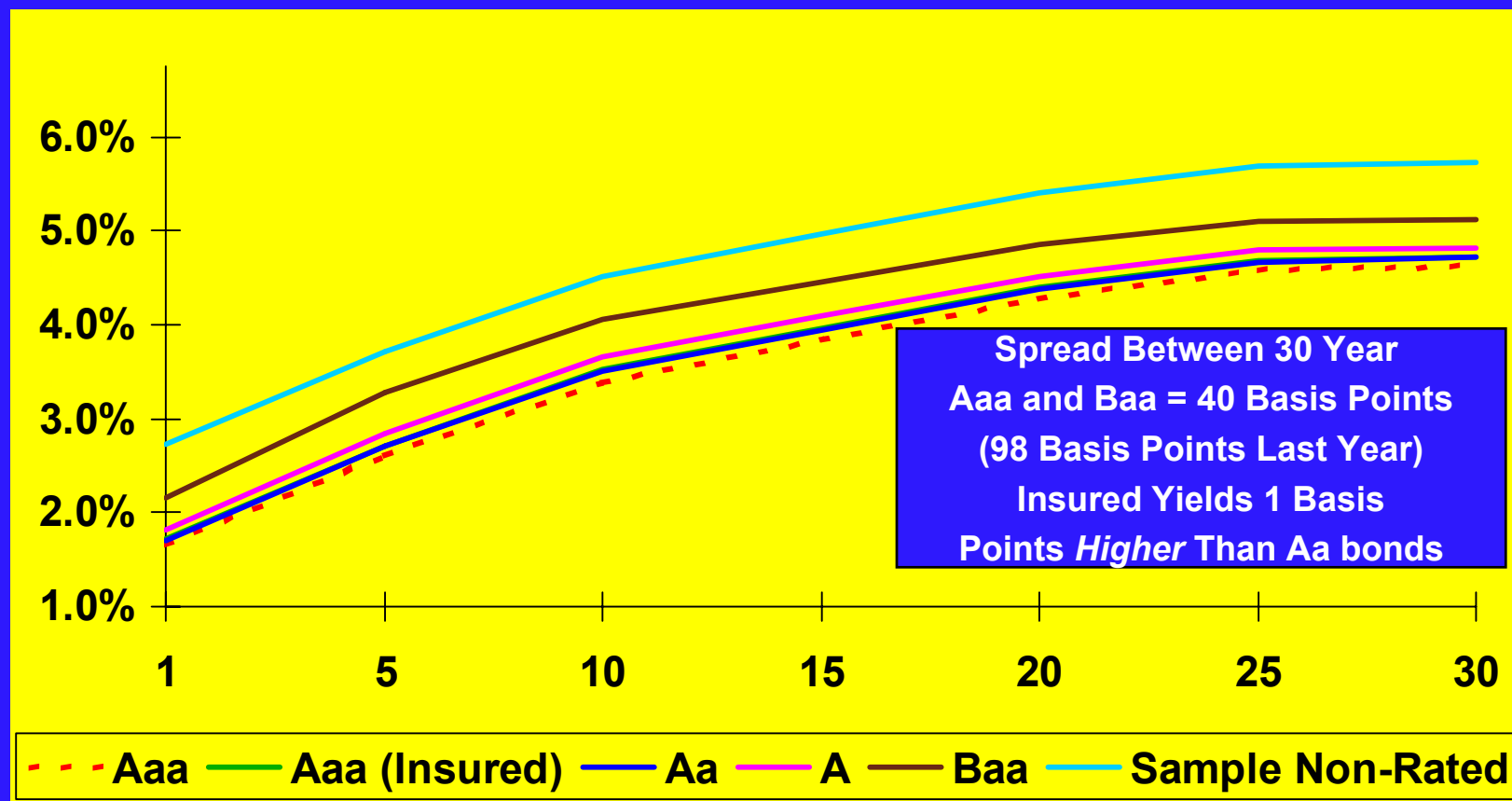
Credit is an important factor, but just one of many



Interest Rates Down



Impact of Ratings on Credit Yields



Representative Yields, October 14, 2004

Source: Municipal Market Data (Thompson)
Non-Rated From Citigroup Global Markets Inc.

Current Insured and G.O. Yields

	<u>National General Obligation Bonds</u>					Calif. Insured	Calif. Non-Rated
	Insured	Aaa	Aa	A	Baa		
1 Year	1.72	1.67	1.81	1.81	2.16	1.65	2.65
5 Years	2.71	2.62	2.7	2.85	3.27	2.57	3.57
10 Years	3.52	3.4	3.5	3.65	4.05	3.50	4.50
15 Years	3.96	3.85	3.95	4.09	4.46	3.98	4.98
20 Years	4.4	4.29	4.38	4.51	4.85	4.39	5.39
25 Years	4.68	4.58	4.67	4.8	5.1	4.66	5.66
30 Years	4.72	4.62	4.71	4.82	5.12	4.70	5.70

Source: Municipal market Data (Thompson)

Non-Rated from Citigroup Global Markets Inc.

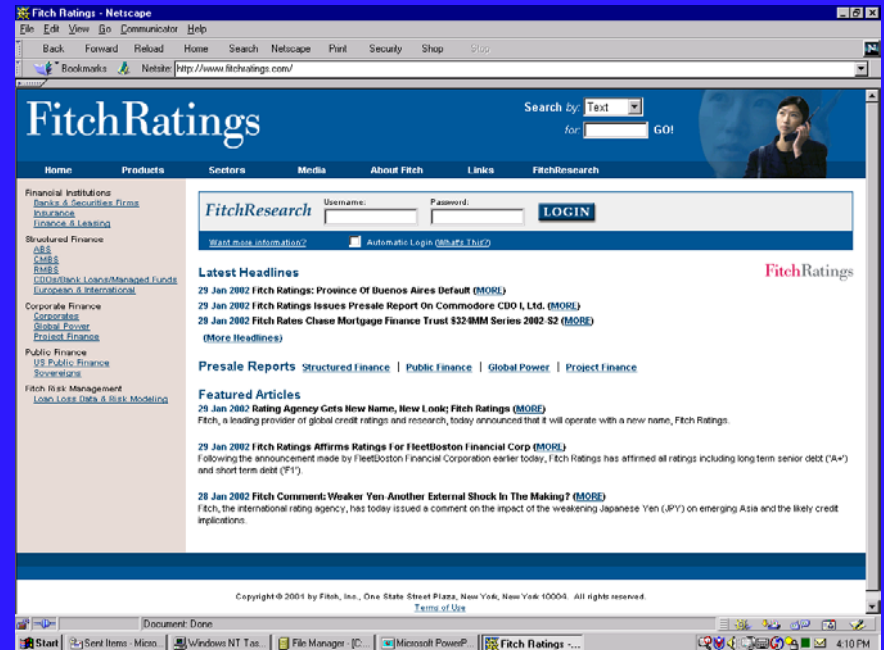
Who are the Rating Agencies?



- Fitch Ratings
- Moody's Investors Service
- Standard & Poor's Ratings Service
- International Firms Developing
- Partnerships and Joint Ventures with United States Firms

Fitch Ratings

- Established in 1912, Introduced Rating Symbols AAA to D in 1922
- 1989: New Management and Capital Infusion
- Mergers with IBCA of London and Duff & Phelps
- California Office in San Francisco
- 2002: Newly Branded as “Fitch Ratings”



www.fitchratings.com

Standard & Poor's

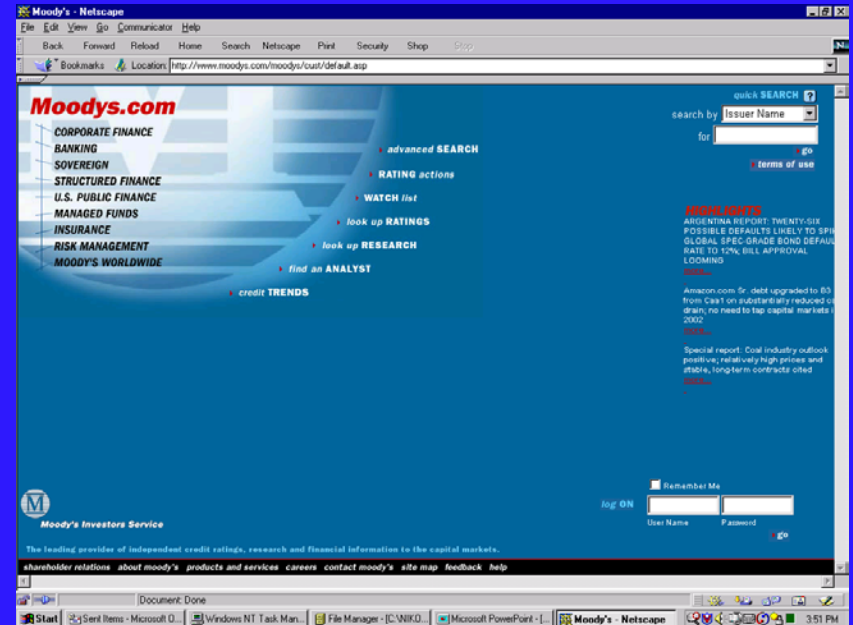
- Traces its Roots to 1860; Henry Varnum Poor Published Guide to U.S. Railroads
- Began Rating Bonds in 1916 with symbols ranging from AAA to D
- Subsidiary of McGraw-Hill Companies, Inc. since 1966
- California Offices in San Francisco



www.standardandpoors.com

Moody's Investors Service

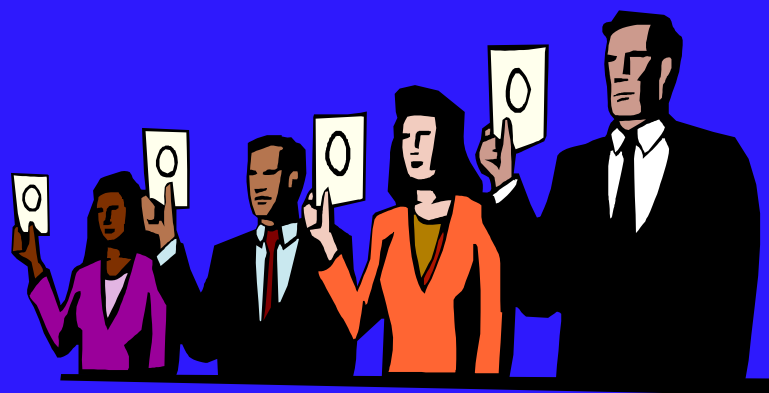
- In 1900 John Moody Published *Manual of Industrial and Corporation Securities*
- In 1909 Introduced First Bond Ratings with Symbols Ranging from Aaa Through C
- California Offices in San Francisco



www.moodys.com

How Do Rating Agencies Work?

- Independent so Each is Different
 - Different Criteria
 - Different Rating Definitions
- Understand the Process
 - Site Visits
 - Role of Lead Analyst
 - Role of Rating Committees
 - Appeals
- Product is Not Just Ratings



Ratings

What Is A Rating?

- Notation Summarizing the Likelihood of Timely Repayment for a Specific Debt Obligation or Group of Parity Obligations
- Letter Category
- “+” and “-” Further Refine Credit Quality Within the Letter Category
- Band of Credit Quality

What A Rating Is NOT:

- A Judgment or Statement Regarding Any Aspect of Public Policy
- A Political Statement in Favor of, or Against, a Particular Person or Administration
- A Dictate of What Should be Done or How a Matter Should be Handled

The Rating Scale

Category	Fitch*	Category	Moody's
Highest	AAA	Best or "gilt edged"	Aaa
Very High	AA+ AA AA-	High Quality	Aa1 Aa2 Aa3
High	A+ A A-	Upper Medium Grade	A1 A2 A3
Good	BBB+ BBB BBB-	Medium Grade	Baa1 Baa2 Baa3
Speculative	BB***	Speculative Lack Desirable Investment	Ba** B**
Highly speculative	B***	Poor Standing Highly Speculative	Caa** Ca
High default risk	CCC***	Lowest Grade	C DDD, DD, D
Default probable	CC	* S&P uses similar scales as Finch ** Refined with a 1, 2, or 3 *** May be refined with a '+' or '-'	
Default is imminent	C		
Default	DDD, DD, D		

Benefits Of A Rating

- Increases Investor Acceptance
- Current Economic Environment
- Current Market Environment
- BOTTOM LINE – Lower Interest Cost
- Ancillary Benefits to You



The Rating Process

- The Beginning: Decisions and Documents
- The Middle: Lets Talk
- The End: Rating Committee, Communication and Dissemination
- Appeal Process, If Necessary

Elements of General Credit Analysis

- Economy
- Debt
- Finances
- Management
- Regulatory Factors
- Issue Legal Structure



Rating Agency Products

- Informal “Look See”
- Credit Assessment
- Full, Published Issue/Issuer Rating
- Private Placement Issue/Issuer Rating
- Credit Enhanced Rating (Insured or Bank Supported)

Rating Changes

- Reflect Changes in Underlying Credit Factors
- Changes Significant Enough to Warrant a Rating Adjustment
- Affect Issue/Issuer Underlying Rating Only (Not Credit Enhanced Rating)



Rating Outlook

- Signals Direction Rating is Headed if Current Patterns Continue
- Positive, Negative or Stable
- Rating Change Potential in Medium Term

Rating Watch

- Signals Potential for Rating Change Depending on the Outcome of Certain Events or Actions
- Positive, Negative or Evolving
- Event or Action Within a Relatively Short Time Period

Key Management Factors in Difficult Times

12 Habits of Highly Successful Finance Officers

Best Practice	Value
● Fund balance/reserve/working capital policy	Very significant
● Debt affordability policies and reviews	Very significant
● Superior debt disclosure practices	Very significant
● Multi-year financial forecasting	Significant
● Quarterly financial reporting and monitoring	Significant
● Pay-as-you-go capital funding policies	Significant
● Rapid debt retirement (>65% maturing in 10 yrs.)	Significant
● Contingency planning	Influential
● Policies regarding non-recurring revenue	Influential
● Five year CIP integrating operating costs	Influential
● Financial reporting award(s) (GFOA, ASBO, etc.)	Influential
● Budgeting award(s) (GFOA, ASBO, etc.)	Influential

Worst Practices - Don't Try This At Home

- Cash Basis Accounting
- Qualified Audit Opinion For Material Weakness
- Deficit Financing for Two of Last Five Years
- Slow Debt Retirement (<35% Maturing in 10 Years)
- Pension Funding Ratio <60%
- TRANS/RANS Par Amount Growing Much Faster Than Annual Spending
- Debt Restructuring That Significantly Defers Debt Service
- Over-Reliance on Non-Recurring Revenue
- Aggressive Investment Policy for Operating Funds
- Pension Contribution Deferral
- Budgetary Impasse Beyond Legal Completion Date
- Lack of Capital Improvement Plan (CIP)
- Excessive and/or Rising Interfund Borrowing With No Capacity to Repay

Enhancing Credit Internally

Internal Enhancements

- Revenue Bonds
 - Additional Bonds Test
 - Lien Structure
 - Rate Covenant
 - Reserves
 - Rate Stabilization

Internal Enhancements

- Lease Revenue Bonds (Certificates of Participation)
 - Nature of Assets Leased
 - Asset Transfer
 - Earmarking of Revenues
 - Insurance Requirements
 - Timing of Payments
 - Reserves

Internal Enhancements

- General Obligation Bonds
 - Amortization Structure
 - Debt Levels
 - Limited Options exist to improve bond structure
 - Improve Credit Perception of Fundamental Credit

External Enhancement: What Are The Options?

External Enhancement Options

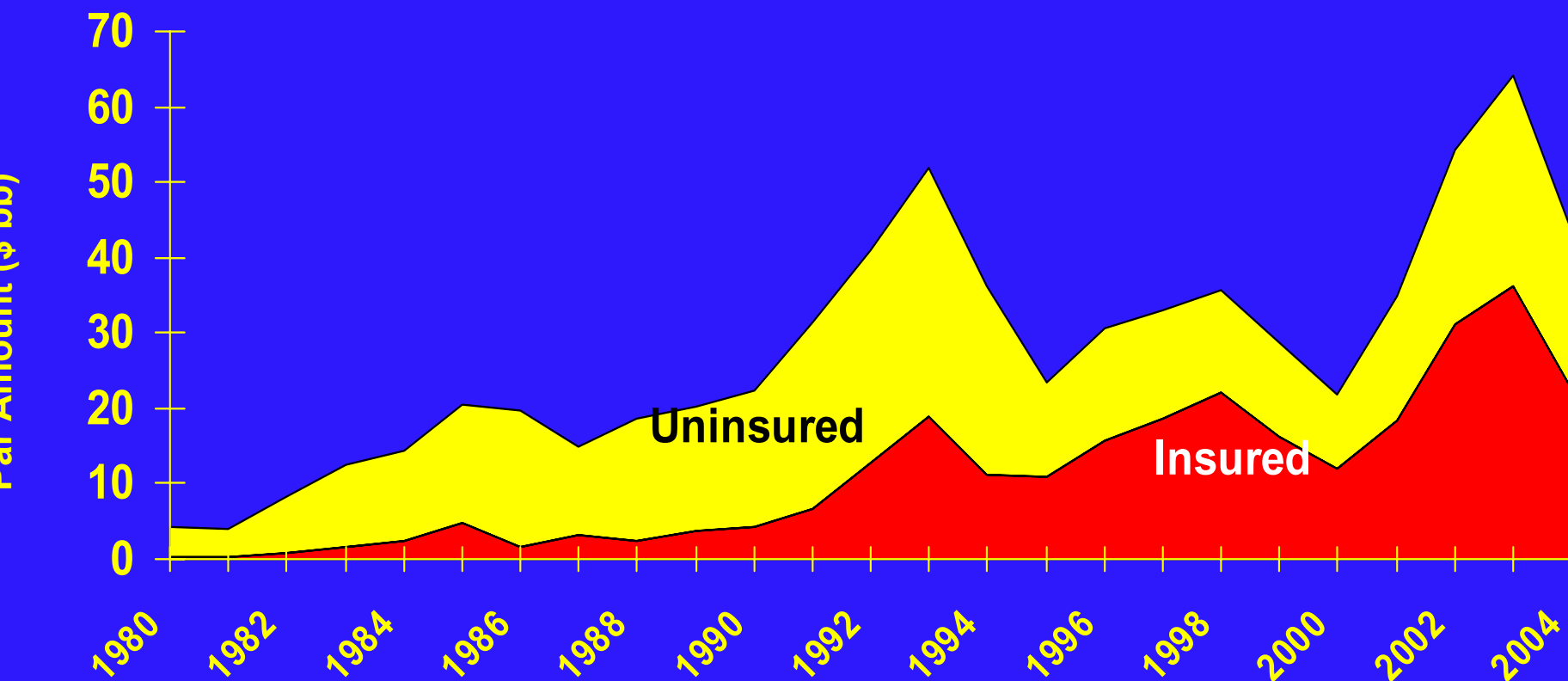
- Bond Insurance
- Letters of Credit
 - On the Deal
 - On the Revenue Stream
- Intercept Program
- Innovative Structures
 - Multiple Pledges

Enhancement and Bond Structures

Non-Rated	Long Term Fixed Short Term Fixed	Limited Universe of Buyers
Rated	Long Term Fixed Short Term Fixed Notes	Broader Buyer Base
Letter of Credit	Variable Rate (Variable Rate Demand Obligations or CP) Notes	Money Market Funds and other short-term investors
Municipal Bond Insurance	Long Term Fixed Short Term Fixed Insured Floaters Auction Rates	Broadest Mix of Buyers, including retail and institutions

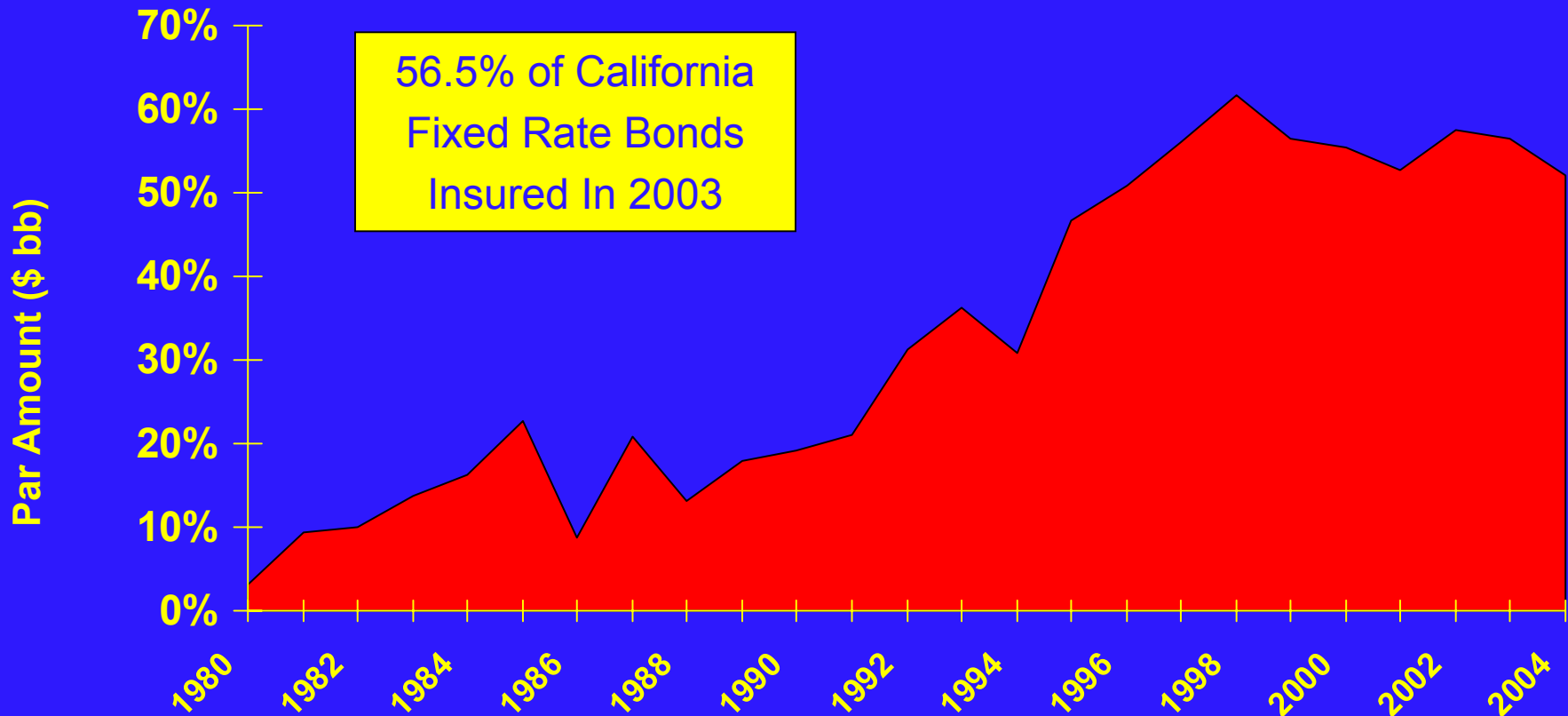
Municipal Bond Insurance

Growth of Bond Insurance in California



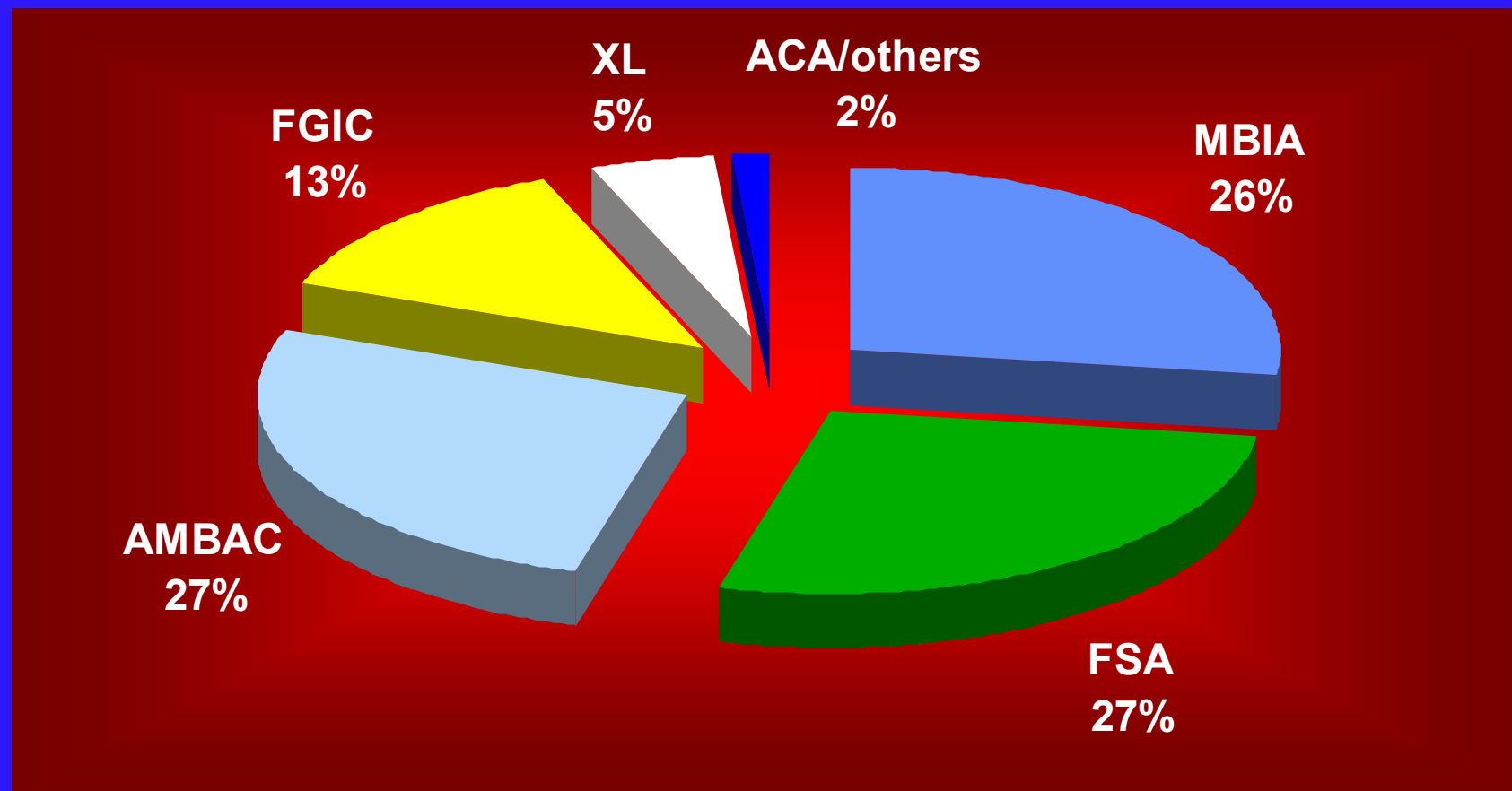
Source: Securities Data Corporation; California Fixed Rate Financings Only.

% of California Market Insured



Source: Securities Data Corporation; California Financings Only.

2003 California Bond Insurer Rankings



Source: Securities Data Corporation; California Fixed Rate Financings Only.

Growing Number of Insurers

	<u>First Policy</u>
● Ambac Indemnity Corporation (Ambac)	1971
● Municipal Bond Investors Assurance Corp. (MBIA)	1974
● Financial Guaranty Insurance Co. (FGIC)	1984
● Financial Security Assurance (FSA)	1985
● Capital Markets Assurance Corp. (CapMAC)	1987
● Connie Lee Insurance Company (CLIC)	1991
● Asset Guaranty Insurance Company (AGIC) (subsidiary of Enhance Reinsurance)	1997
● American Capital Access (ACA)	1997
● Dexia Acquires FSA Holdings	2000
● XL Insurance Earns Aaa/AAA/AAA	2001

Source: MBIA and S&P

Bond Insurance Issues

- Does the Insurer Matter
 - How Do They Trade?
 - Premiums
 - Deal Structure
- What is the Process for Insuring a Bond?
 - When to Get Them Involved?
 - Face-to-Face?
 - “Competitive vs. Negotiated”
- New Developments in Premiums
 - How are Premiums Paid
 - 2004 Premiums

Letters of Credit

What Are Letters of Credit?

- Arrangement with a Bank that Provides Additional Security that Money will be Available to Pay Debt Service on a Bond Issue
- Letters of Credit Can Provide:
 - Credit Enhancement
 - Liquidity

Basic Mechanics

- Typically Used for Variable Rate Transactions
- Term of LOC Typically From 1 to 5 Years
- Annual Fees are Calculated as a % of Outstanding Principal
- Quoted in Basis Points (b.p.): 100 b.p. = 1%
- May Require Commitment Fee

Types of Letters of Credit

- Direct Pay Letter of Credit
 - Paid from Bank Funds
 - Annual Fees for Bank's Unconditional Obligation to Pay Draws on the LOC
 - Acceleration of Debt in Event of Default, Paid from Draw on LOC
- Prioritized Direct Pay Letter of Credit
 - Holdings Paid from LOC Only to the Extent Other Sources Held by the Trustee are Insufficient
 - Bankruptcy Concerns

More Types of LOCs

- Standby Letter of Credit
 - Issuer Funds Used Prior to Draw on LOC
 - If Issuer Funds are Insufficient, Bonds Subject to Mandatory Redemption or Tender
 - One Draw - Holders Paid Principal and Accrued Interest, the Transaction is Collapsed

Structured Finance Ratings

- If Bank Will Provide Complete and Timely Payment, the Bonds are Re-Rated Based on Bank's Credit Rating
- Factors
 - Payment Structure
 - Enforceability of the LOC
 - Adequacy of Coverage
- Detailed Requirements
- Mandatory Tenders Prior to Substitution or Termination

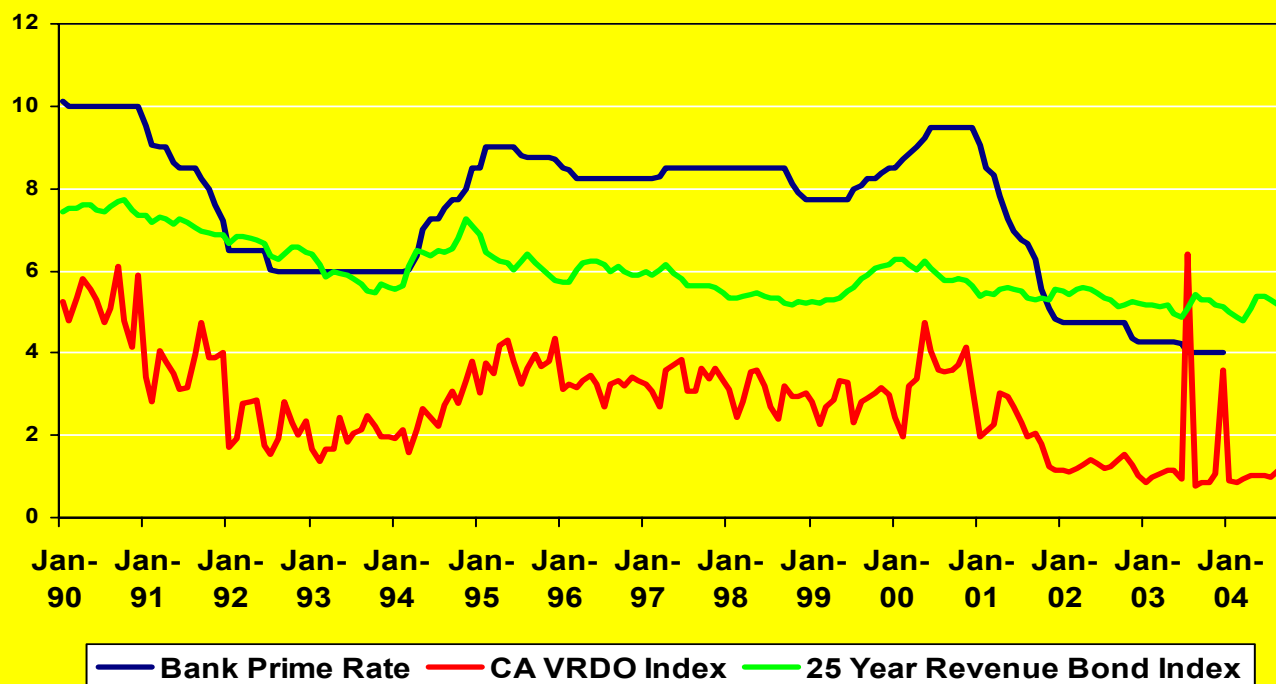
Fitch's Short-Term Ratings

- A short-term rating has a time horizon of less than 12 months for most obligations, or up to three years for U.S. public finance securities, and thus places greater emphasis on the liquidity necessary to meet financial commitments in a timely manner.

F1 - Highest credit quality
F2 – Good credit quality
F3 – Fair credit quality
B – Speculative
C – High default risk
D – Default

Comparative Short Term Rates

Bank Prime Rate (Blue) v. California VRDO Index (Red)
1990 - Present



Source: Municipal Market Data (Thomson)

Not All LOCs Are Created Equal

- In Deciding on an LOC Provider, the Borrower Should Consider the Ongoing Bank Fees and the Expected Trading Value of the LOC
- Lowest Cost is Calculated Using Both the LOC Fees and Trading Premium/Discount
- Beware of Renewal Risk

Relative Trading Values

Subject to Change Without Notice

Tier I (Base Rate)

Barclays Bank PLC (Aa1/P-1; AA/A-1+)
 Bayerische Landesbank (Aaa/P-1; AAA/A-1+)
 Citibank, N.A. (Aa1/P-1; AA/A-1+)
 Deutsche Bank (Aa3/P-1; AA-/A-1+)
 Dexia Credit Local (Aa2/P-1; AA/A-1+)
 Landesbank Hessen Thuringen (Aaa/P-1; AAA/A-1+)

Landesbank Baden-Wuerttemberg (Aaa/P-1; AAA/A-1+)
 Lloyds TSB Bank PLC (Aaa/P-1; AA/A-1+)
 Rabobank Nederland NV (Aaa/P-1; AAA/A-1+)
 UBS AG (Aa2/P-1; AA+/A-1+)
 Westdeutsche Landesbank (Aa1/P-1; AA+/A-1+)

Tier II (Base Rate to +5 bps)

ABN AMRO (Aa3/P-1; AA-/A-1+)
 Bank of America (Aa1/P-1; A+/A-1)
 Credit Agricole (Aa2/P-1; AA/A-1+)
 Commonwealth Bank of Australia (Aa3/P-1; AA-/A-1+)
 Credit Suisse First Boston (Aa3/P-1; A+/A-1)
 Dresdner Bank (Aa3/P-1; A+/A-1+)
 ING Bank NV (Aa2/P-1; AA-/A-1+)

JPM Chase (A1/P-1; A+/A-1)
 KBC NV (Aa3/P-1; A+/A-1)
 National Westminster Bank PLC (Aa1/P-1; AA-/A-1+)
 State Street Bank & Trust Co. (Aa2/P-1; AA/A-1+)
 Toronto Dominion Bank (Aa3/P-1; A+/A-1)
 Wachovia Bank (Aa3/P-1; A/A-1)

Tier III (+5 bps to +10 bps)

Relative Trading Values

Subject to Change Without Notice

Tier III (+5 bps to +10 bps)

Allied Irish Banks (Aa3/P-1; A/A-1)

AmSouth Bank (A1/P-1, A/A-1)

Bank Austria AG (A1/P-1; A-/A-2)

Banco Santander (A1/P-1; A/A-1)

Bank of Ireland (Aa3/P-1; A+/A-1)

Bank of Montreal (Aa3/P-1; AA-/A-1+)

Bank of New York (Aa2/P-1; A+/A-1)

Bank of Nova Scotia (Aa3/P-1; A+/A-1)

Bank One (Aa2/P-1, A/A-1)

BNP Paribas (Aa2/P-1; AA-/A-1+)

Bayerische Hypo-und Vereinsbank (A1/P-1; A-/A-2)

CIBC (Aa3/P-1; A+/A-1)

Comerica Bank (A1/P-1; A/A-1)

Commerzbank (A2/P-1; A-/A-2)

Credit Commercial de France (Aa3/P-1; AA-/A-1+)

Fleet Bank (Aa3/P-1; A+/A-1)

HSBC (Aa2/P-1; AA-/A-1+)

Mellon Bank (Aa3/P-1; AA-/A-1+)

National Australia Bank (Aa3/P-1; AA/A-1+)

Royal Bank of Canada (Aa2/P-1; AA-/A-1+)

Royal Bank of Scotland (Aa1/P-1; AA-/A-1+)

Societe Generale (Aa3/P-1; AA-/A-1+)

SunTrust Bank (Aa3/P-1; A+/A-1)

Svenska Handelsbanken NV (Aa2/P-1, A+/A-1)

Westpac Banking Corp. (Aa3/P-1; AA-/A-1+)

Credit/Liquidity Alternatives

Strongest Investment Grade Credits		Other Investment Grade Credits	
No Credit or Liquidity Support	Liquidity Support Only	Irrevocable Letter of Credit	Bond Insurance with Liquidity Support
<ul style="list-style-type: none"> ➤ Payment of principal and interest not credit enhanced ➤ Unrestricted liquid assets provide liquidity support ➤ Requires stable underlying credit of at least "A" ➤ Issuer must have substantial unrestricted liquid assets (at least 3 times outstanding variable rate debt) 	<ul style="list-style-type: none"> ➤ Payment of principal and interest not credit enhanced ➤ Commercial bank provides liquidity support ➤ Requires stable underlying credit of at least "A" ➤ Liquidity bank must have short-term ratings of at least "P-1" and "A-1" 	<ul style="list-style-type: none"> ➤ Letter of credit guarantees payment of principal and interest ➤ Letter of credit provides liquidity support 	<ul style="list-style-type: none"> ➤ Bond insurance guarantees payment of principal and interest ➤ Commercial bank provides liquidity support

Liquidity Facilities

- Mechanics
 - Used on Variable Rate Transactions
 - Ensures Investors with Ample Liquidity in the Event of a Bond Tender; Not Considered a Long-Term Security Vehicle
 - Drawn Upon in a Failed Remarketing
 - Term of Liquidity Facility Typically 1 to 5 Years
- Borrowers Rated AA- or Higher will Often Need Only a Liquidity Facility - No LOC
 - Borrowers Rated A+ or Below May Need to Combine a Liquidity Facility with Bond Insurance to Enhance the Long-Term Rating

LOC Considerations

- Factors to Consider:
 - Annual Fees
 - Ability to Choose
 - Flexibility in Documents (Sort of!)
 - Make Choice of Providers
 - VRDOs: Low, Low Rates
 - Ability to Pick and Choose Liquidity and/or Enhancement

More Considerations

- But There Are Pitfalls ...
 - Level of Enhancement May Change (Rating Volatility)
 - Volatility in Trading Value
 - Legal Fees and Time Associate with Structuring
 - VRDO Interest Rate Risk
 - Short Term of LOC: Renewal Risk
 - Dominated by Foreign Banks: “Home Office” Approval
- Other Options Available: Insurers Can Insure Floaters Too
- Variable Rate Exposure Through Interest Rate Swaps

Revenue Intercept Programs

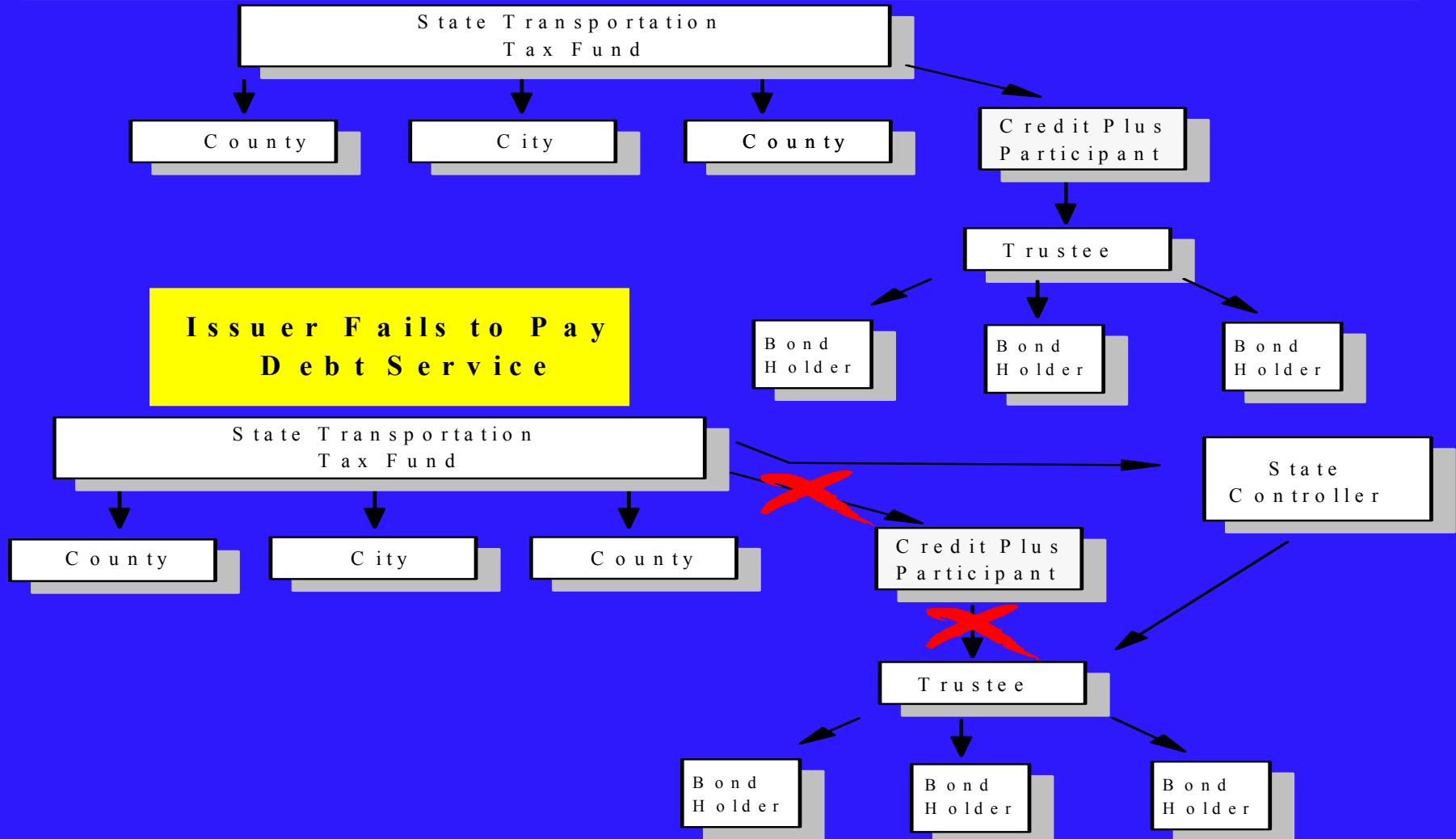
MVLF Intercept Program

- CDIAC was Driving Force in Creating Mechanism for California Communities
- Cities and Counties May Pledge Monthly Motor Vehicle License Fee (MVLF) Apportionments
- Standard & Poor's "A" Rating Through "Credit Plus" Program
- Intercepting an Existing Revenue Source

MVLF Intercept Program

- In Past Provided Opportunities for Increasing Credit Rating
- Inexpensive Enhancement for Lease Revenue Bonds and Certificates of Participation
- State Uncertainty With Respect to MVLF Places Cloud Over Application Benefit in Today's Market

How the State Intercept Works



Getting Creative: Innovations

Getting Creative: Innovations

- Pooling of Credits
- Contingent Obligations
- Debt Service Reserve Fund Make-Up Provisions
- Changing View on Moral Obligations
- Corporate Guarantees
- Public Entity Guarantees
- Prioritization of Liens: Senior/Subordinate Structures

Case Study: CSU Channel Islands

CSUCI's Credit Enhancement

- Began with a Mello-Roos Bond
 - No Revenues, No Development
 - Layered in a Tax Allocation Pledge
 - Still Not Investment Grade
 - One Technique Not Always Enough
- “Credit Engineering”
 - Worked Closely with Rating Agency
- Letter of Credit
- Triple-A Bond Insurance From MBIA
 - Without Revenues or Development

Getting Creative: Innovations

- Public Entity Guarantees
 - Tax Increment
 - General Fund
 - Enterprise Operations
- Prioritization of Liens: Senior/Subordinate Structures
- Use of Intercept Program
- Gross Revenue Pledge

Sifting Through the Options

Sifting Through the Options

- What Do You Want to Accomplish? What is the Goal?
 - Lowest Interest Rates?
 - Buyers?
- How to Evaluate the Price of Enhancement

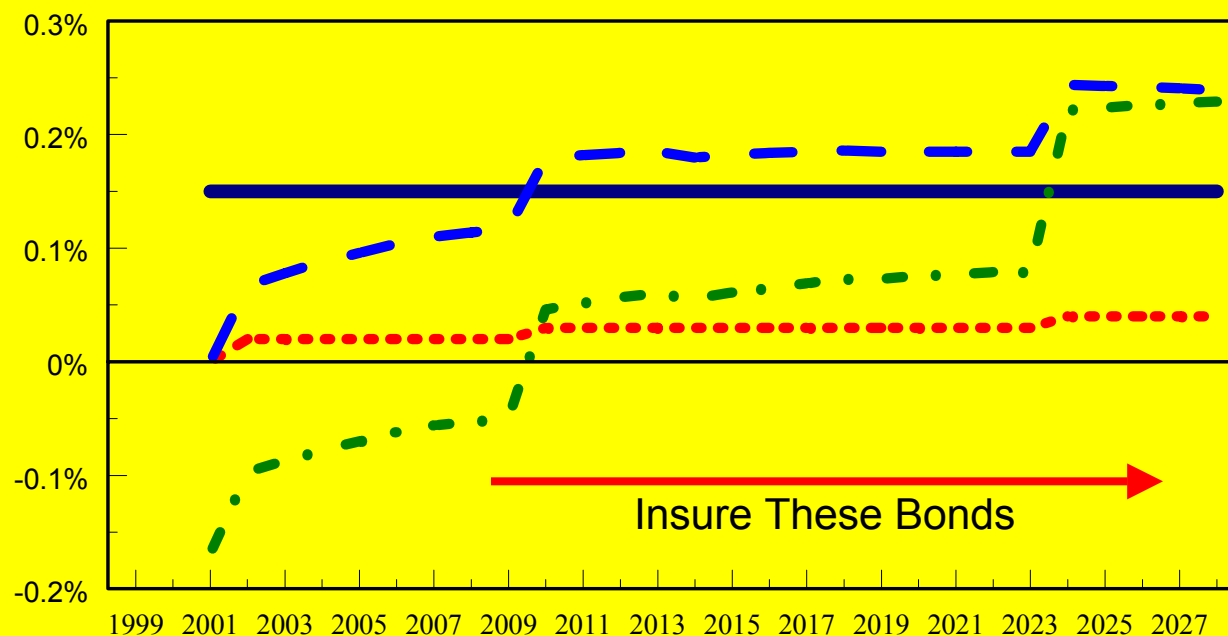
Checking the Scales

<u>Maturity</u>	<u>Yields</u>		<u>Interest Rate Differential</u>	<u>Proposed Insurance Premium</u>
	<u>Insured</u>	<u>Uninsured</u>		
2005	1.65%	1.80%	0.15%	0.15%
2006	1.75%	2.00%	0.25%	0.15%
2007	2.00%	2.26%	0.26%	0.15%
2008	2.24%	2.52%	0.28%	0.15%
2009	2.57%	2.86%	0.29%	0.15%
2014	3.50%	3.67%	0.17%	0.15%
2019	3.98%	4.10%	0.12%	0.15%
2024	4.39%	4.50%	0.11%	0.15%
2029	4.66%	4.78%	0.12%	0.15%
2034	4.70%	4.82%	0.12%	0.15%
2005	1.65%	1.80%	0.15%	0.15%

California Yields as of October 14, 2004

Source: Municipal Market Data (Thomson)

Assessing the Insurance Option



Proposed Insurance Premium

Proposed Rate Differential

PV % Savings from Insurance

Breakeven Insurance Premium

Bond-By-Bond Analysis

Example One

- Large, Double-A Rated Issuer
- 30 Year Revenue Bonds
- Conclusion
 - Sold Serial Bonds Unenhanced
 - Sold Term Bonds Enhanced

Example Two

- Low Rated Issuer
- Very Large Bond Issue (Billions)
- Very High Demand for Issue
- Not all Maturities Show Savings Due to High Premium
- Insurer Sets Threshold Level of Insurance

Conclusion: The Bottom Line

Concluding Comments

- No One Technique Fits All Needs of All Issuers or All Financings for an Issuer
 - Some Needs Require Multiple Forms of Enhancement
- Market is Dynamic - The Right Choice Is Not Constant
 - Careful Analysis of Options Can Save You Money
- Real Time, Real Market Information is Essential
 - “Ask the Desk”

Questions and More Information

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